

REMARKS

Status of the Claims

Claims 1, 5, 11-13, 36, 37, and 46-51 are pending in this application, claims 2-3, 6-10, 14-35, and 38-45 having been cancelled. All the pending claims stand rejected. After entry of the amendments made herein, claims 1, 5, 11-13, 36, 37, and 46-51 will be pending in this application, claim 4 having been cancelled without prejudice to its being presented in a separate application.

Amendments to the Specification

In both the paragraph beginning on page 7, line 2, and the paragraph beginning on page 26, line 4, of the specification there are inadvertent errors in the range of nucleotides in SEQ ID NO:5 that constitute SEQ ID NO:2, the cDNA sequence that encodes human B7-H1 (hB7-H1). In the text on page 7, the range of nucleotides is stated to be 72-870 (page 7, line 3) and in the text on page 26, the range of nucleotides is stated to be 72-951 (page 26, line 11). The range in both cases should, as indicated in the above amendments to the specification, be 73-942. One of skill in the art, knowing that a start codon of a cDNA sequence encoding a mammalian protein is always "ATG", would know that nucleotide 72 (a "G") could not be the first nucleotide of SEQ ID NO:2. In addition, and more importantly, given the amino acid sequence of hB7-H1 (SEQ ID NO:1) in Figure 2, such a person could readily discern the location in SEQ ID NO:5 of the first and last nucleotides of SEQ ID NO:2. In light of these considerations, the above amendments to the specification add no new matter.

35 U.S.C. § 102(e) rejection

Claims 1, 4, 11-13, 36, and 37 stand rejected as allegedly being anticipated by Freeman et al.

From the comments on page 2, line 17, to page 3, line 5, and page 5, lines 5-11, of the Office Action, Applicant understands the Examiner's position to be that, while the disclosure of Freeman et al. is not prior art with respect to the instant claims as they relate to murine B7-H4 nucleic acids, the disclosure and claims in the Freeman et al. do anticipate the instant claims as they relate to human B7-H4 nucleic acids. While not necessarily agreeing with this position, in order to expedite prosecution of the instant application, Applicant has changed claim 1 and cancelled claim 4 so as remove embodiments specifying human B7-H4 nucleic acids from these claims. The amendments are made without prejudice to these embodiments being presented in a separate application.

In light of the above amendments, Applicant respectfully requests that the rejection under 35 U.S.C. § 102(e) be withdrawn.

35 U.S.C. § 103(a) rejection

Claims 46-51 stand rejected as allegedly being unpatentable over Freeman et al.. Applicant respectfully traverses the rejection.

From the comments on page 3, line 20, to page 5, line 3, of the Office Action, Applicant understands the Examiner's position to be that, in view of the Freeman et al.'s disclosure of the SEQ ID NO: 4 containing a signal peptide at "about amino acids 1-18" and the state of the art at the priority date of the instant invention, it would have been obvious to one of ordinary skill in the art to have made a construct encoding human B7-H4 lacking amino acids 1-22 but containing an exogenous signal peptide. Applicant strongly disagrees with this position.

Given the teaching of Freeman et al., if one of ordinary skill in the art wished to make a construct containing a nucleic acid sequence encoding only the mature B7-H4 sequence, such an artisan would likely make a construct encoding a polypeptide lacking amino acid 1-18. There would be no reason for such an artisan to contemplate making a construct containing less B7-H4

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amino acids than specifically disclosed by Freeman et al.; he or she would likely be concerned about the possibility of "missing" one or more important amino acids. Moreover, even if one ordinarily skilled in the art were to consider making a construct lacking codons in addition to those encoding amino acids 1-18 of instant SEQ ID NO:1, there exists no motivation in Freeman et al., or the art in general, to create a construct specifically lacking codons 1-22 of SEQ ID NO:1.

In light of the above considerations, Applicant respectfully submits that Freeman et al. does not render claims 46-51 obvious and thus requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

Claim objection

Claim 5 is objected to for being dependent on a rejected claim. Applicant respectfully submits that, in view of the above amendment, claim 1 is not anticipated by Freeman et al. and thus that the objection to claim 5 is moot.

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CONCLUSIONS

Applicant submits that the pending claims patentably define the invention. Applicant requests that the Examiner reconsider the rejections set forth in the Office Action, and permit the pending claims to pass to allowance.

If the Examiner would like to discuss any of the issues raised in the Office Action, Applicant's undersigned representative can be reached at the telephone number listed below.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 07039-187001.

Date: _____

8/13/03

Respectfully submitted,



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